

Appl. No. 09/879,335

**REMARKS**

Claims 1-57 are pending in the application with claim 22 amended herein. Claims 51-57 are canceled herein as being drawn to a non-elected invention. In keeping with the restriction requirement, Applicants hereby elect claims 1-50 without traverse for prosecution on the merits.

The Office Action also requires an election of a single disclosed species. Applicants hereby elect with traverse Species I. It is impossible from the Office Action to discern how the Office defines allegedly distinct species and is thus impossible for the Applicant to provide a listing of claims readable on Species I. Applicants reluctantly state that claims 1-21 and 29-35 are readable on Species I, merely for the sake of compliance with the restriction requirement and not because Applicants have any belief whatsoever that such claims are the only claims readable on the alleged identified, Species I.

Applicants assert that the species restriction is fatally defective and hereby request withdrawal of same and prosecution of claims 1-50 on the merits. Species I is merely described as "forming of a capacitor." Species II is merely described as "forming of a barrier layer." Species III is merely described as "forming of an opening." Applicants note that every pending independent claim (claims 1, 16, 22, 29, 36, and 43) present an identical preamble setting forth "a capacitor forming method." Applicants further note that every pending independent claim includes both "forming a barrier layer" and "forming an opening." Accordingly, the species definitions alleged on page 2 of the Office Action are entirely meaningless. The species definition merely provides a list of claims

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Appl. No. 09/879,335

allegedly readable on the listed species without any appropriate basis whatever for defining the species and restricting the claims into the indicated groups.

MPEP 806.04(e) states that claims are definitions of inventions but "claims are never species." (Emphasis in original). Rather, "species are always the specifically different embodiments." MPEP 806.04(e) (Emphasis in original). Claims may be restricted to a single embodiment and thus be designated a specific species claim, or may include two or more embodiments and be designated a generic claim. MPEP 806.04(e). Since the alleged species definitions in the Office Action are meaningless, the only definition of species presented is a listing of claim numbers for each of the alleged three species. The Office Action does not provide any valid description of what defines the species and a basis for the listed claims supposedly readable thereon.

Due to the deficiencies of the Office Action, Applicant asserts that no adequate reasons have been set forth as to (1) why the inventions as claimed are either independent or distinct, and (2) why grounds exist for insisting upon restriction. Pursuant to MPEP 808, the requirement to restrict set forth in the Office Action must provide an adequate basis as to both aspects. Even if the Office later establishes the claimed inventions are independent and distinct, MPEP 808.02 requires a showing by appropriate explanation that the inventions as claimed as separately classified, possess a separate status in the art even though classifiable together, or require different fields of search. No such criteria are established in the present Office Action.

If the Office maintains the present species restriction requirement, Applicants respectfully traverse the statement on page 3 of the Office Action that there are no generic

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Appl. No. 09/879,335

claims. Applicants assert that claim 1 is generic at least to every pending independent claim, namely claims 16, 22, 29, 36, and 43. That is, every limitation set forth in claim 1 is also set forth in each of the listed independent claims and, therefore in each of the claims depending from the listed independent claims. Further, claim 1 as a generic claim does not include any material element additional to the elements recited in the above listed claims and comprehends within its confines the organization covered in each of the listed claims. At least claim 1, and perhaps other claims, are thus to be considered generic in keeping with MPEP 806.04(d). Since claim 1 is generic, Applicant will be entitled to consideration of claims directed to any alleged species readable thereon.

Accordingly, Applicant asserts that all pending claims 1-50 are entitled to prosecution on the merits and request action on such claims in the next Office Action.

Respectfully submitted,

Dated: 11 Jan 2002

By: \_\_\_\_\_

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TECHNOLOGY CENTER 2800

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Appl. No. 09/879,335

Application Serial No. .... 09/879,335  
Filing Date ..... June 11, 2001  
Inventor..... Vishnu K. Agarwal, et al  
Assignee..... Micron Technology, Inc.  
Group Art Unit..... 2813  
Examiner ..... Y. Huynh  
Attorney's Docket No. .... MI22-1568  
Title: Capacitor Forming Methods and Capacitor Constructions

**VERSION WITH MARKINGS TO SHOW CHANGES MADE ACCOMPANYING  
RESPONSE TO DECEMBER 11, 2001 OFFICE ACTION**

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**In the Claims**

TECHNOLOGY CENTER 2800

The claims have been amended as follows. Underlines indicate insertions and  
~~strikeouts~~ indicate deletions.

22. (amended) A capacitor forming method comprising:
- forming a barrier layer to  $V_t$  shift inducing material over a substrate, the substrate including an electronic device;
  - forming an insulation layer over the barrier layer;
  - forming an opening into at least the insulation layer;
  - forming a high K capacitor dielectric layer at least within the opening; and
  - providing  $V_t$  shift inducing material over the barrier layer, the barrier layer retarding movement of the  $V_t$  shift inducing material into the electronic device.

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